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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/802,545	03/17/2004	Daan Veenigen	94.0076	3709

7590 11/30/2007
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EXAMINER

THOMPSON, KENNETH L

ART UNIT	PAPER NUMBER
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3672

MAIL DATE	DELIVERY MODE
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11/30/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/802,545	Applicant(s) VEENINGEN ET AL.	
	Examiner Kenneth Thompson	Art Unit 3672	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 November 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-67 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-67 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Objections

Claims 1-67 are objected to because of the following informalities:

The first instance of the recitation "each hole section" lacks antecedent basis.

The claims should set forth the wellbore having hole sections. Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-67 are rejected under 35 U.S.C. 102(e) as being anticipated by Wylie et al., U.S. 2004/0149431.

Regarding claim 1-67, Wylie et al. discloses recording and displaying means for [0146] generating a summary of a drillstring for an interval in response to data [0167], generating a diameter of the first and second drill collar [0124] with respect to the drift diameter, generating an outer diameter of a heavy drillstring for various sized boreholes [0021,0022], generating weight on the bit [0258], first collar or section (324) and second

collar (318) of the drill string, generating lengths for the first and second collars or sections [0257], determining tension [0426], cost [0225] and kick tolerance [0213].

Wyle et al. discloses [0138] to be successful, the monodiameter wellbore and Monowell require a higher level of precision in all areas including seismic interpretation, reservoir modeling, planned well path, and individual **drilling component designs**. Historical information from drilling the surrounding wells, along with seismic and geomechanical analyses, provides valuable insight into the well path and borehole stability management. In exploration areas, this information is limited, but similar formation information can be used as well as real-time information.

Wylie et al. discloses information needed in planning and constructing a monodiameter wellbore, achieved by drilling and casing one formation section at a time sequentially, include seismic analyses, geomechanical analyses, drilling fluid formulations, drilling bit designs, well path trajectories, completion design for extending the well's life, stresses, potential compaction and possible shallow water flows.

Wylie et al. discloses geomechanical models and analysis are available, such as from Baroid, Geomechanics International, Sperry Sun, and Landmark, which take into account both chemical and mechanical borehole stability issues and can analyze the borehole stability from a mechanical standpoint.

Wylie et al. discloses Landmark Graphic's 3D Drill View and 3D Drill View KM (Knowledge Management), allow the operator to visualize, analyze and interpret MWD/LWD and drilling operational data in real-time. The 3D visualization of real-time

data, together with the pre-planned earth model, enables the operator to make more rapid decisions.

Wylie et al. discloses Historical information from drilling the surrounding wells, along with seismic and geomechanical analyses, provides valuable insight into the well path and borehole stability management. In exploration areas, this information is limited, but similar formation information can be used as well as real-time information.

Response to Arguments

Applicant's arguments filed 1 November 2007 have been fully considered but they are not persuasive.

Applicant argues the prior art does not design a drill string section specifically for a to/bottom interval and diameter of a wellbore.

The prior art discloses use of a higher level of precision planned well path, and individual **drilling component designs**.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kenneth Thompson whose telephone number is 571 272-7037. The examiner can normally be reached on 6:00 am - 2:30 pm.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David J. Bagnell can be reached on 571-272-6999. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

27 November 2007


Kenneth Thompson
Primary Examiner
Art Unit 3672